

KATHRYN KALMBACH HERBARIUM

OUTGOING LOAN PROCEDURES

1. Pull the requested specimens from the herbaria. Always leave the genus folders in their original location.
2. Pack the specimens following instructions on the next page.
3. Locate the outgoing loan paperwork template via the following path: "Q:\Research\Forms - Any and all\KHD.Template.gift.exchange.loans.return.docx". Notice that the document has four distinct sections:
 - a. Shipping notice & description – page 1
 - b. Outgoing Loan Agreement – page 2
 - c. Appendix – page 3
 - d. Destructive Sampling of Herbarium Specimens – pages 4-5
4. Complete the form. Highlighted sections of the template indicate either a blank to fill in, or optional portions which only apply to cases of destructive sampling.
 - a. Find the herbarium code by searching the New York Botanical Garden's Index Herbariorum (<http://sweetgum.nybg.org/science/ih/>)
 - b. Fill out the Appendix table. The left column is a running count of the specimens included in the package; the right column is the KHD barcode.
 - c. Delete the "Destructive Sampling of Herbarium Specimens" section, unless destructive sampling has been requested and approved by the Head Curator.
5. Rename the document as HerbariumCode.YYYY.MM. (For example, "COCO.2016.10" is a loan sent to Colorado College's Carter Herbarium in October 2016.) Save the document in the "Q:\Research\All Herbaria\KHD\Loans and Gifts\OutgoingLoans" folder.
6. Print 2 copies and give to the Head Curator for review and approval. One copy is included within the package, and one copy is kept for Herbaria records.

“HOW TO” NO.3

HOW TO PACK HERBARIUM SPECIMENS FOR A LOAN

Although digitization of specimens can help to protect specimens by making loans unnecessary for certain types of research, physical loans will always be needed for systematic research. Practices differ from institution to institution, but the following packing suggestions will help ensure that herbarium specimens arrive in perfect shape.

CHOOSE A BOX

The length and width of the box should be slightly larger than a herbarium specimen. For typical U.S. specimens mounted on 16.5 in. X 11.5 in. cardstock, many herbaria use an 18 X 12 box. However, once the bundles are packed, some herbaria find that slightly larger boxes (e.g., 19 X 12.5) allow for easier packing and better padding, especially if they are using standard 18 X 12 pressing corrugates for packing. When specimens are placed in the box, additional cardboard can fill in around the inside for a snug and protective fit if needed. The box should have a bursting strength of at least 200 lbs. per square inch, and many herbaria find 275 lbs. to be worth the extra cost.

PLACE FLIMSIES ON SHEETS

An acid-free flimsy (a single-fold sheet of paper) that covers both sides of the entire specimen is ideal. If acid-free paper is not available or beyond the budget, other choices are unprinted newsprint, any plain lightweight paper and, as a last resort, printed newsprint, which may lead to the unfortunate result of black ink rubbing off on the mounting paper. [Note: on “Downton Abbey” the butler ironed the newspaper before presenting it to the lord, so that the ink wouldn’t come off. In the herbarium world, old newsprint is somewhat “cured” and less likely to transfer.]

The fold in the flimsy should be on the left, for ease of separating flimsy from specimen later on. [“Lefties” may prefer to have the fold on the right.] Some herbaria stamp the flimsy with their logo for

return, and it’s courteous to return them if possible. In any case, acid-free flimsies should never be discarded, as reusing them will lead to more archival flimsies joining the general circulation. Some herbaria place a flimsy only on every other sheet; this practice saves time and affords some cushioning. However, any plant parts that become loose during shipment likely won’t remain on the sheet and will be lost. Using a flimsy on every sheet is preferable.

ARRANGE SPECIMENS IN SMALL STACKS

If planning to use corrugated cardboard on the top and bottom of a stack, loosely stack specimens no more than 5-6 inches high (usually 25-40 sheets, depending on bulkiness). When the stack is tied, it will compress to about 3 inches high.

If not using corrugated cardboard, i.e., bundling the specimens in genus folders or 1-2 layers of paper, the stack should be smaller, only an inch or two high.

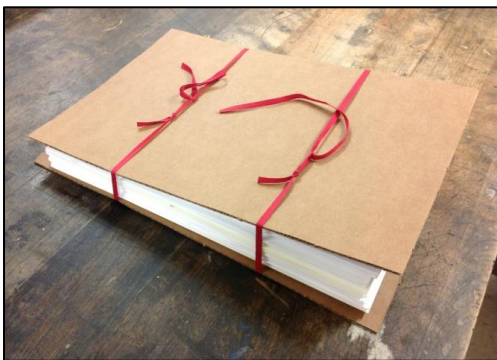
BUNDLE SPECIMENS (CARDBOARD METHOD)

Place a stack of specimens on a sturdy corrugate. Better yet, center a single specimen in its flimsy on a corrugate and build up the stack, keeping each sheet directly over the sheet below and within the boundaries of the bottom corrugate. Specimens with more bulk may be turned 180 degrees to keep the sheets as flat as possible. Some packers turn every group of 10 sheets, with the dual aim of keeping the stack from becoming lopsided and also facilitating counting. Some specimens, however, are so bulky that further measures are needed. For instance, there may be a danger of a spine puncturing the specimen above it, or a rootstock deforming it, in which case adding padding or paper wadding is necessary. Wadding should be placed on the *outside* of the flimsy, to avoid rubbing against or otherwise damaging the plant specimen. All specimens in the bundle must face up.



Adding paper wadding on a bulky specimen

Finish the stack with a second corrugate on top, and secure the bundle with string. (Narrow cotton cloth tape that won't cut into the corrugate and/or sheets is especially nice.) For reusable string, cut a piece of string about 1½-2 yards long and make a knot with a loop on one end (yo-yo knot). Wrap the string crosswise around the bundle, bring the end of the string through the loop, secure with one finger and make another loop with the taut string to draw up close to the first loop, leaving a "tail" which can be pulled for a quick-release knot. Alternatively, flat tape can be tied in a bow. Bundles need to be tied snugly in order to keep the specimens from jostling against one another during transit but not tied so tightly that the cardboard creases. Using two ties equally spaced around the bundle is favored.



Tying cotton tape around bundle to compress

To complete, wrap paper (36 in.-wide, 60 lb. brown Kraft paper is ideal) around the bundle, keeping track of which side is up. Position the long edge of paper lengthwise and overlap the edges in the center of the corrugate; secure with tape. Fold and tape the shorter ends. By keeping the paper seam consistently on top, the packer will always

know that the specimen side is "up", and the specimens won't be shipped upside down (!). Once a bundle is finished, it is useful to write a brief description of the contents (e.g., loan number, number of sheets and destination herbarium) on the upper side—this not only keeps track of what is inside but also avoids bundles from being boxed upside down.

A small piece of paper with the loan number, number of specimens in bundle and/or number of bundles is helpful in readying the specimens for shipping and also verifying the contents once the loan reaches its destination. If there's a discrepancy in the count, it's easy to see where the error occurred.

Bundling without corrugates is another variation; by using smaller bundles and a tight outer wrapping, the specimens will be stable. Loose corrugates can be interspersed between several bundles in the box.

BOX SPECIMENS

Place a used corrugate or other cushioning on the bottom of the box, as well as the sides as needed. Add bundles *right side up*, a packing invoice and enough corrugates, wadded paper, bubble wrap, etc. to fill up the box. A piece of packing material placed on top of the shipping form protects the form from being marred or sliced when the box is opened.



Packing box with cardboard reinforcements

Reinforced, gummed, brown packing tape is good for sealing the box and covering the seams. Use a thoroughly wet sponge to activate the gummed side.

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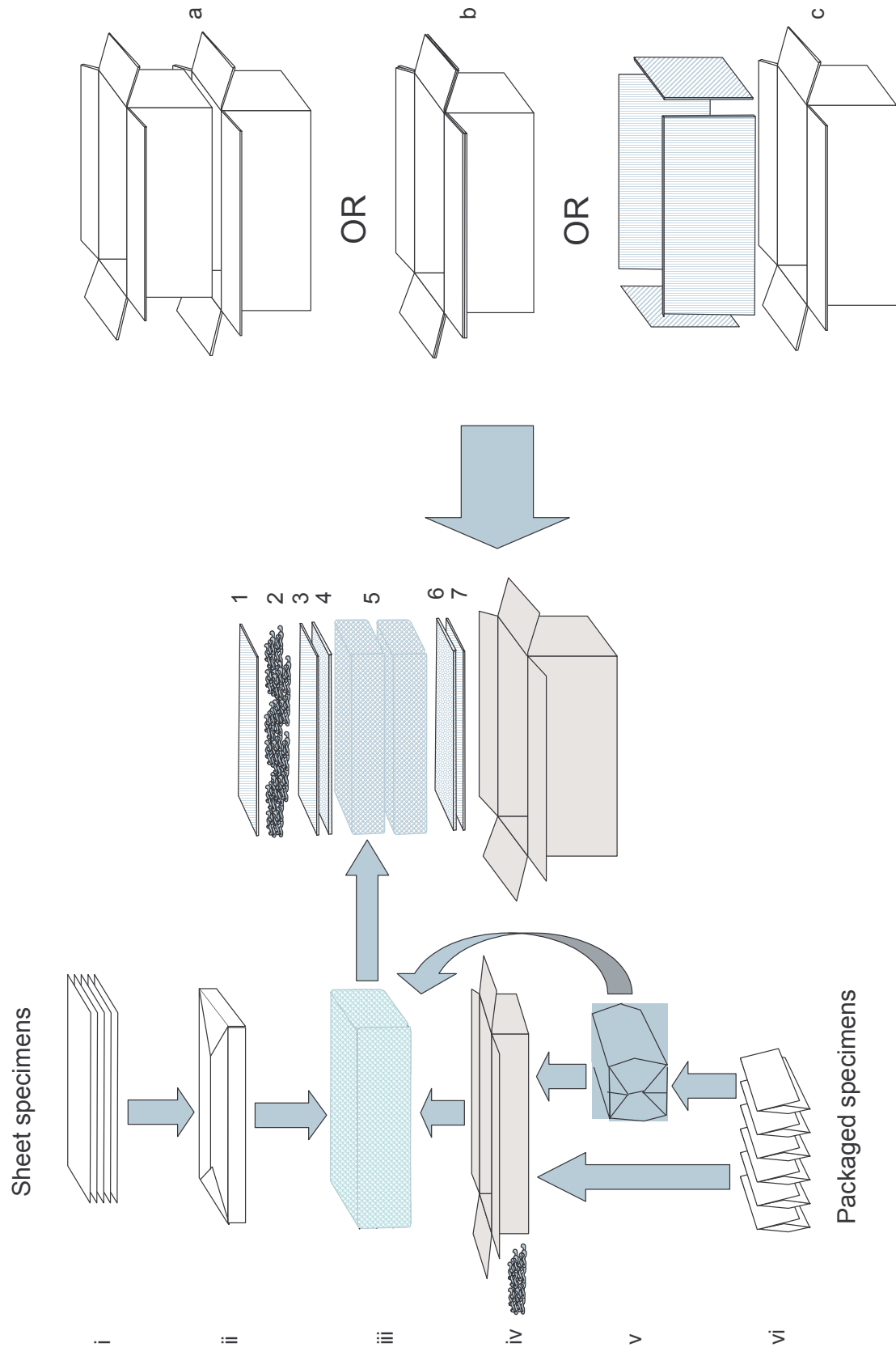


Figure 1: Diagram illustrating packaging method for herbarium specimens.